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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/516,941

12/15/2004

Kenji Seki

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23850 7590 08/24/2009
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EXAMINER

HENDRICKSON, STUART L

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

08/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/516,941	Applicant(s) SEKI, KENJI	
	Examiner Stuart Hendrickson	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-16,18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-8, 16, 18, 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The RCE is accepted.

Claims 1, 2, 6-8, 16, 18, 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the preamble, especially the 'canister case' is confusing as to how it differs from canister. Is the carbon really put in a canister, which is then put into something else? What exactly is being claimed- a case, a carbon composition or both together? In claim 1, 'the micropore' is without antecedent and unclear as to how it relates to anything else in the claim, and misuses the term micropore which is defined by IUPAC as 20-500 Å. Is 'average pore diameter' meant?

Claims 1, 2, 6-8, 16, 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steelman et al. 5506293 taken with Klett 6673328 and Klett 6780505.

Stelman teaches, especially in col. 3, placing an encapsulated phase-change material into a carbon composition. An intimate mixture is contemplated and depicted. This differs in not using active carbon, however Klett teaches in col. 5 that phase change materials can be incorporated into active carbon. Thus, using the carbon of Klett in the process of Steelman is an obvious expedient to provide a heat adsorbing material. The sizes are considered to be obvious to provide a heat sink, and are suggested by the term 'microencapsulation' and the pore sizes expected of active carbons. The above does not teach a canister, however Klett '505 teaches, especially in col. 2 and fig. 2, putting thermal absorbing carbon in a canister and sending it into space. Thus, this is an obvious expedient to exploit its heat sorbing properties. Concerning the case of canisters, preparing several and shipping them (to NASA for example) in the same box is an obvious expedient to conduct a business operation.

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Applicant's arguments filed 6/25/09 have been fully considered but they are not persuasive.

Previous arguments are incorporated. The term 'canister' refers to an empty container, and the definitions cited show this. The preamble should clearly state exactly what is being claimed. Why not just say 'A case containing carbon, wherein the carbon ...'? The argument of the limitation of former claim 3 overlooks the fact that the above rejections explain why this is obvious. The implied argument of unexpected results of pore diameter is not persuasive, especially in view of the fact that the phase change material is larger than the pores, so it cannot possibly fit inside them. In summary, applicant has not clearly claimed what they are arguing as novel and unobvious.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

/Stuart Hendrickson/
Primary examiner Art Unit 1793